

## **REMARKS**

### **Summary of the Office Action**

The drawings stand objected to for lacking reference numerals.

The specification stands objected to for grammatical informalities and for containing reference numerals not shown in the drawings.

Claims 1 – 5 stand objected to for various informalities.

Claims 1 – 5 stand objected to under 35 U.S.C. § 112, second paragraph, as allegedly indefinite.

Claims 1 and 2 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent No. 2,552,703 to Alonso (“Alonso”).

Claims 3 – 5 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Alonso in view of U.S. Patent No. 5,56,122 to Schulte (“Schulte”).

### **Summary of the Response to the Office Action**

Applicant amends Figs. 1 and 2 in accordance with the Replacement Drawings submitted with attached Appendix A.

Applicant amends the Specification in accordance with the Replacement Specification submitted with attached Appendices B and C.

Applicant amends the Abstract to be consistent with the Replacement Specification.

Applicant amends claims 1 – 5 to correct the informalities noted in the Office Action and to define the claimed subject matter further. Support for these amendments is found at least in

Figs. 1 and 2 and the claims as originally filed. Thus, Applicant respectfully submits that the above amendments introduce no new matter within the meaning of 35 U.S.C. §132.

Applicant requests reconsideration and timely withdrawal of the pending rejections for at least the reasons discussed below.

#### **The Objections to the Drawings**

The drawings stand objected to for lacking reference numerals. Specifically, the drawings lack a reference numeral for the volume tube mentioned in the specification, and for allegedly failing to show the dragging rod recited in the claims. In response, Applicant amends Figs. 1 and 2 in accordance with the Replacement Drawings of attached Appendix A. Specifically, Applicant amends the drawings to designate the volume tube as reference numeral 1 and to designate the dragging rod (shown but undesignated in the original figures) as reference numeral 100. Applicant respectfully submits that the amended drawings comply with the comments of the Office Action, and requests that the objection to the drawings be withdrawn.

#### **The Objections to the Specification**

The specification stands objected to for not being in proper idiomatic English and for containing reference numerals not shown in the drawings. Applicant amends the Specification as shown in attached Appendices B and C. Appendix B is a marked up copy of the replacement Specification showing the changes from the original Specification. Appendix C is a clean copy of the replacement Specification. Applicant also amends the Abstract to be consistent with the Replacement Specification and the amended claims.

Applicant respectfully submits under 37 C.F.R. § 1.125 that the substitute specification includes no new matter. Applicant further respectfully submits that the amended specification does not narrow the intended scope of the claims, and therefore Applicant does not relinquish any subject matter by the amendments. For at least these reasons, Applicant requests that the objections to the Specification be withdrawn.

**The Objections to the Claims**

Claims 1 – 5 stand objected to for various informalities. Applicant amends claims 1 – 5 to correct the informalities as suggested in the Office Action, and respectfully requests that the objections to the claims be withdrawn. Applicant respectfully submits that these amendments do not narrow the intended scope of the claims, and therefore Applicant does not relinquish any subject matter by the amendments.

**The Rejections under 35 U.S.C. § 112, Second Paragraph**

Claims 1 – 5 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Applicant amends claims 1 – 5 as suggested by the Examiner. Accordingly, Applicant submits that amended claims 1 – 5 comply with 35 U.S.C. § 112, second paragraph. Applicant respectfully submits that these amendments do not narrow the intended scope of the claims, and therefore Applicant does not relinquish any subject matter by the amendments. For at least these reasons, Applicant requests that the rejections of claims 1 – 5 under 35 U.S.C. § 112, second paragraph, be withdrawn.

**The Rejections under 35 U.S.C. § 102(b)**

Applicant respectfully submits that the rejections of claims 1 and 2 must be withdrawn

because the cited reference does not disclose, teach, or suggest all of the features of the claimed subject matter. “Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration.” *W.L. Gore & Assocs. V. Garlock*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). Further, “when evaluating the scope of a claim, every limitation in the claim must be considered. U.S.P.T.O. personnel may not dissect a claimed invention into discrete elements and then evaluate the elements in isolation. Instead, the claim as a whole must be considered.” *U.S.P.T.O. Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility*, page 9, October 26, 2005. As the Federal Circuit stated, “[a]nticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.” *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Col.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)).

Here, Applicant amends claim 1 to recite in part a feeding pump comprising “a volume tube (1) having a metering volume section (11) defined therein, a dragging mechanism (2), two unilateral inlet valves (8) and two unilateral outlet valves (7) in two ends of an inner wall thereof respectively and a piston (9), wherein the piston (9) is connected to the dragging mechanism (2).” Applicant submits that Alonso fails at least to disclose or suggest “a metering volume section (11) defined therein ... two unilateral inlet valves (8) and two unilateral outlet valves (7) in two ends of an inner wall thereof respectively” as recited in amended claim 1 (emphasis added). As shown in Alonso Fig. 8, Alonso discloses a pump having piston (79) in cylinder (78) and inlet valves and

outlet valves (112) and (113). Valves (112) and (113) are disposed on upper and lower flanges (82) and (83) outside internal cylinder (78), with end chambers (87) and (104) also disposed outside internal cylinder (78).

Accordingly, Alonso fails to disclose, teach, or suggest each and every features of amended claim 1. For at least these reasons, Applicant submits that claim 1 is allowable. Applicant also respectfully submits that claim 2 is allowable at least because it depends from allowable claim 1. Accordingly, Applicant requests that the rejection of claims 1 and 2 under 35 U.S.C. § 102 be withdrawn.

### **The Rejections under 35 U.S.C. § 103**

Claims 3 – 5 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Alonso in view of U.S. Patent No. 5,56,122 to Schulte (“Schulte”). Applicant respectfully disagrees, and traverses these rejections for at least the following reasons.

To establish an obviousness rejection under 35 U.S.C. § 103(a), four factual inquiries must be examined. The four factual inquiries include (a) determining the scope and contents of the prior art; (b) ascertaining the differences between the prior art and the claims in issue; (c) resolving the level of ordinary skill in the pertinent art; and (d) evaluating evidence of secondary consideration. *Graham v. John Deere*, 383 U.S. 1, 17-18 (1966). In view of these four factors, the analysis supporting a rejection under 35 U.S.C. 103(a) should be made explicit, and should “identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements” in the manner claimed. *KSR Int’l. Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1741 (2007). Furthermore, even if the prior art may be combined, there must be a reasonable

expectation of success, and the reference or references, when combined, must disclose or suggest all of the claim limitations. *See In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Here, even if the references could be combined with a reasonable expectation of success, the combined references do not disclose or suggest all the features of claims 3 – 5. Claims 3 – 5 depend from allowable claim 1, and Schulte fails to cure the deficiencies of Alonso with regard to claim 1. In other words, the secondary reference, Schulte, is cited by the Examiner as allegedly teaching the additional features of claims 3 – 5 but still does not teach the features of amended independent claim 1. Schulte, like Alonso, fails to disclose or suggest the “volume tube (1) having a metering volume section (11) defined therein, a dragging mechanism (2), two unilateral inlet valves (8) and two unilateral outlet valves (7) in two ends of an inner wall thereof respectively and a piston (9), wherein the piston (9) is connected to the dragging mechanism (2)” of claim 1 discussed above in the section regarding anticipation.

Thus, even if one of ordinary skill in the art happens to combine Alonso with Schulte, the combined references still do not teach or suggest such feature of claim 1. For at least these reasons, claim 1 is allowable. Applicant respectfully submits that claims 3 – 5 are also allowable at least because they depend from allowable claim 1. Since none of the other prior art of record, whether taken alone or in any combination, discloses or suggests all the features of the claimed subject matter, Applicant respectfully submits that independent claim 1 and all the claims that depend therefrom are allowable. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 3 – 5 under 35 U.S.C. §103(a).

# # # #

**CONCLUSION**

Applicant believes that a full and complete response has been made to the pending Office Action and respectfully submits that all of the stated grounds for rejection have been overcome or rendered moot. Accordingly, Applicant respectfully submits that all pending claims are allowable and that the application is in condition for allowance.

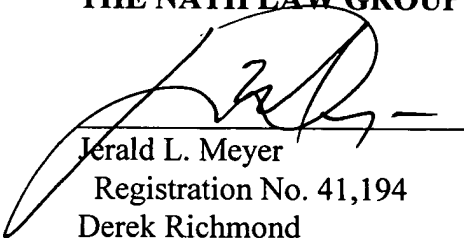
Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicant's undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

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**APPENDIX A**  
**REPLACEMENT DRAWINGS**